REMARKS

This Reply is in response to the Office Action mailed on May 10, 2005 in which Claims 1-42 were rejected. With this response, Claim 38 is cancelled, Claim 21 is amended and Claims 43-45 are added. Claims 1-37 and 39-45 are presented for reconsideration and allowance.

I. Examiner Interview Summary.

On July 28, 2005, a telephonic interview was held between Examiner Prasad and Applicants' attorney, Todd A. Rathe. The rejection of the claims based upon Sathe et al., U.S. Patent No. 5,754,400, was discussed. The rejection of Claims 1 and 15 based upon Sathe were specifically discussed. It was tentatively agreed upon that the rejection of independent Claims 1 an 15 based upon Sathe should be withdrawn since Sathe fails to disclose a plurality of resilient support members asymmetrically located about the axis (Claim 1) or a resilient support member that resiliently engages the circuit board or a structure coupled to the circuit board prior to the first connector portion being connected to the second connector portion (Claim 15). The rejection of the remaining independent claims based upon Sathe was also generally discussed. It was agreed that in light of the discussions with regard to Sathe, the rejection of the remaining independent claims would also need to be reconsidered. The Examiner further agreed to consider such claims without making the next subsequent Office Action final to allow Applicant further opportunity to amend the claims if necessary.

Applicants wish to thank Examiner Prasad for the opportunity to discuss the rejection based upon Sathe and look forward to working with the Examiner further with regard to this application.

II. Objection to the Specification.

Paragraph 1 of the Office Action objected to the title by asserting that the title of the invention is not descriptive. Applicants respectfully traverse this objection. The present title of the application recites offset compensation system. Claim 42

specifically recites "an offset compensation system." Claim 33 recites an element described as "an offset compensation system". Thus, it is believed that the present title does indicate the subject matter of the claims in the present application. Any further amendment to the title may ultimately result in an unduly limiting construction of such claims.

Paragraph 2 of the Office Action objected to the disclosure noting that the serial numbers of co-pending applications are missing. In response, the specification is amended to add such serial numbers. Accordingly, Applicants respectfully request that the objection to the specification be withdrawn.

III. Information Disclosure Statement.

Paragraph 3 of the Office Action asserted that the Information Disclosure Statement has a lot of references but the relevance to the present invention is questionable because no explanation of the relevance was provided. Applicants respectfully note that explanations of the relevance of references recited in an information disclosure statement are not required for English language references.

IV. Rejection of Claims 1-3, 5-7, 11-13, 15-17, 19, 20-25, 28-36 and 38-42 Under 35 U.S.C. § 102(b) Based Upon Sathe.

Paragraph 5 of the Office Action rejected Claims 1-3, 5-7, 11-13, 15-17, 19, 20-25, 28-36 and 38-42 under 35 U.S.C. § 102(b) as being anticipated by Sathe et al., U.S. Patent No. 5,754,400. With this response, Claim 21 is amended and Claim 38 is cancelled. Claims 1-3, 5-7, 11-13, 15-17, 19, 20-25, 28-36 and 38-42 overcome the rejection based upon Sathe et al.

A. Claim 1.

Claim 1 recites a computing system having a first connector portion electrically connected to a circuit board and a second connector portion electronically coupled to an electronic device and connected to the first connector portion along an axis. Claim 1 further recites a plurality of resilient support members

asymmetrically located about the axis and extending between the device and circuit board.

As noted above, during the Examiner interview held on July 28, 2005, it was tentatively agreed upon that the rejection of Claim 1 based upon Sathe should be withdrawn since Sathe fails to disclose a plurality of resilient support members asymmetrically located about the axis. Because Claims 2-3, 5-7 and 11-13 depend from Claim 1, the rejection of such claims based upon Sathe should also be withdrawn.

B. Claim 15.

Claim 15 recites a computing component which includes an electronic device and a first connector portion electrically connected to the device and configured to be electrically connected to a second connector portion that is coupled to a circuit board along a first axis. The computing component further includes a resilient support member coupled to the electronic device and extending beyond the first connector portion so as to resiliently engage a circuit board or a structure coupled to the circuit board prior to the first connector portion being connected to the second connector portion.

As noted above, during the Examiner interview held on July 28, 2005, it was tentatively agreed upon that the rejection of Claim 15 based upon Sathe should be withdrawn since Sathe fails to disclose a support member that resiliently engages a circuit board or a structure coupled to the circuit board prior to the first connector portion being connected to the second connector portion. Because Claims 16-17, 19 and 20-25 depend from Claim 15, the rejection of such dependent claims should also be withdrawn.

C. Claim 28.

Claim 28 recites a processor component which includes a processor device, a first connector portion electrically connected to the processor device and configured to be connected to a second connector portion connected to a circuit board. Claim

28 also recites a resilient support member extending beyond the first connector portion and configured to be compressed during connection of the first connection portion to the second connector portion.

Sathe fails to disclose or suggest a resilient support member extending beyond a first connector portion that is configured to be compressed during connection of the first connector portion to the second connector portion. As generally noted during the Examiner interview held on July 28, 2005, Sathe merely discloses solder balls 216 that connect electronic component 106 to circuit board 202. Spring 220 (characterized by the Office Action as the resilient support member) is not configured to extend beyond such solder balls 216 (characterized as the first and second connectors) so as to be compressed during connection of the electronic component 106 to printed circuit board 202 by solder balls 216. In contrast, Sathe specifically teaches that electronic component 106 is first connected to printed circuit board 202 using solder balls 216. Only after such connection is heat sink positioned on top of electronic component 106 so as to compress spring 220. Thus, the rejection of Claim 28 based upon Sathe should be withdrawn. Because Claims 29-30 depend from Claim 28, the rejection of the claims based upon Sathe should also be withdrawn.

D. Claim 31.

Claim 31 recites a computing system which includes means for resiliently supporting the second end of the electronic component relative to the circuit board as the first connector portion is being connected to the second connector portion.

Sathe fails to disclose any means for resiliently supporting a second end of an electronic component as the first connector portion that is electrically connected to the circuit board is being connected to the second connector portion that is electrically connected to the electronic device. As noted above with respect to Claim 28, nowhere does Sathe disclose or even suggest that spring 220 (characterized as the resilient supporting means in the Office Action) is compressed during or as

electronic component 106 is being connected to printed circuit board 202 by solder balls 216. Accordingly, the rejection of Claim 31 should be withdrawn.

E. Claim 32.

Claim 32 recites a method for connecting an electronic component having a first end, an opposite second end, an electronic device and a first connector portion closer to the first and the second end to a circuit board having a second connector portion. The method includes resiliently supporting the second end as the first connector portion is moved into connection with the second connector portion.

Sathe fails to disclose a method in which a second end of electronic component is resiliently supported as the first connector portion of the electronic component is moved into interconnection with a second connector portion of a circuit board. Once again, nowhere does Sathe disclose or suggest that spring 220 resiliently supports electronic component 106 as electronic component 106 is being connected to printed circuit board 202 by solder balls 216. In contrast, Sathe appears to disclose that the connection of electronic component 106 to printed circuit board 202 is completed prior to heat sink 102 even engaging spring 220. Accordingly, the rejection of Claim 32 should be withdrawn.

F. Claims 33, 40 and 42.

Independent Claims 33 and 40 each recite a computing system having an electronic component with a center of mass and an electronic device having a connector portion electrically connected to the electronic device and configured to coupled to a first connector portion of a circuit board along a connection axis offset from the center of mass such that the electronic component experiences a first torque involving a tilt axis perpendicular to and intersecting the connection axis. Claims 33 and 40 additionally recite an offset compensation system while Claim 42 is directed to an offset compensation system for use with the aforementioned elements of Claims 33 and 42. The offset compensation system of Claims 33 and 42 includes at least one force applying mechanism coupled to one of the circuit

board and the electronic component and configured to apply force to the other of the circuit board and the electronic component at at least one location such that a second opposite torque about the tilt axis is exerted to the electronic component prior to connection of the first connector portion and the second connector portion. The offset compensation system of Claim 40 includes means for applying to the electronic component a second torque about the torque axis opposite to the first torque prior to connection of the first connector portion and the second connector portion.

Sathe fails to disclose an offset compensation system including at least one force applying mechanism or means that applies a second torque about the tilt axis opposite to the first torque prior to connection of the first connector portion and the second connector portion. Nowhere does Sathe disclose or suggest that solder balls 16 are located along an axis offset from a center of mass of electronic component 106 or the combination of electronic component 106 and heat sink 102. Moreover, nowhere does Sathe disclose or suggest that spring 220 creates a second torque about the tilt axis opposite to any such first created torque. In addition, as noted above, nowhere does Sathe disclose or suggest that spring 220 creates such a torque prior to connection of electronic component 206 to printed circuit board 202 by solder balls 216. Thus, the rejection of independent Claims 33, 40 and 42 based upon Sathe should be withdrawn. Claims 34-36 and Claim 41 depend from Claims 33 and 40, respectively. Thus, the rejection of such dependent claims should also be withdrawn.

V. Rejection of Claims 4 and 18 Under 35 U.S.C. § 103(a) Based Upon Sathe.

Paragraph 7 of the Office Action rejected Claims 4 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Sathe et al., U.S. Patent No. 5,754,400. Claims 4 and 18 depend from independent Claims 1 and 15 and overcome the rejection for the same reasons discussed above with respect to Claims 1 and 15.

VI. Rejection of Claim 8 Under 35 U.S.C. § 103(a) Based Upon Sathe.

Paragraph 8 of the Office Action rejected Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Sathe et al., U.S. Patent No. 5,754,400. Claim 8 depends from Claim 1 and overcomes the rejection based upon Sathe for the same reasons with respect to Claim 1.

VII. Rejection of Claims 9-10 and 27 Under 35 U.S.C. § 103 Based Upon Sathe.

Paragraph 9 of the Office Action rejected Claims 9-10 and 27 under 35 U.S.C. § 103 as being unpatentable over Sathe et al., U.S. Patent No. 5,754,400. Although Applicant disagrees that such would be obvious as a mere arrangement of parts, the rejection is moot in that Claims 9 and 10 depend from Claim 1 and Claim 27 depends from Claim 15. Claims 9, 10 and 27 overcome the rejection for the same reasons discussed above with respect to Claims 1 and 15.

VIII. Rejection of Claims 14, 26 and 37 Under 35 U.S.C. § 103(a) Based Upon Sathe.

Paragraph 10 of the Office Action rejected Claims 14, 26 and 37 under 35 U.S.C. § 103 as being unpatentable over Sathe et al., U.S. Patent No. 5,754,400. Claims 14, 26 and 37 each recite that the resilient support member is a resilient foam member. In acknowledgment that Sathe fails to disclose a resilient support member, the Office Action takes official notice that "such a feature is common knowledge, well known and widely used in electrical connectors." Applicants respectfully traverse this assertion of official notice and request that evidence be provided that resilient foam members are commonly used in electrical connectors. Moreover, nowhere does Sathe disclose or suggest that cushioning is a problem to be solved in its demountable heat sink. Thus, it would not be obvious to somehow utilize a resilient foam in Sathe. Regardless, Claims 14, 26 and 37 depend independent Claims 1, 15 and 33 and overcome the rejection of Sathe for the same reasons discussed above with respect to such claims.

IX. Added Claims.

With this response, Claims 43-45 are added. Claims 43-45 depend from independent Claims 1, 15 and 28, respectively, and further recite that the resilient support member is carried by the computing component or electronic device. The prior art of record fails to disclose the recited subject matter of Claims 43-45. Accordingly, Claims 43-45 are presented for consideration and allowance.

X. Conclusion.

After amending the claims as set forth above, Claims 1-37 and 39-45 are now pending in this application.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 08-2025. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 08-2025. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 08-2025.

Respectfully submitted,

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